

State of Hawaii
DEPARTMENT OF LAND AND NATURAL RESOURCES
Division of Aquatic Resources
Honolulu, Hawaii 96813

April 24, 2009

Board of Land
and Natural Resources
Honolulu, Hawaii

Request for Approval of Special Activity Permit 2009-52 for
Dr. Michael Blum of Tulane University, and Designated Assistants

The applicant proposes to use unlawful small mesh nets to take non-lethal genetic samples from a variety of freshwater organisms across the State to study goby recruitment and stream ecosystems. The Division has worked extensively with the applicant to minimize the potentially negative impacts from this portion of this relatively large study. The maximum numbers of samples of each species at each site authorized under this permit are listed on Appendix 1.

RECOMMENDATION:

"That the Board authorize and approve, with stated conditions, this Special Activity Permit for Dr. Michael Blum, Tulane University."

Respectfully submitted,



DAN POLHEMUS
Administrator

APPROVED FOR SUBMITTAL:



LAURA H. THIELEN
Chairperson

Department of Land & Natural Resources
DIVISION OF AQUATIC RESOURCES
1151 Punchbowl Street, Room 330
Honolulu, Hawaii 96813

Date Issued: April 24, 2009

Valid not longer than April 23, 2010

SPECIAL ACTIVITY PERMIT

The Department of Land and Natural Resources hereby grants permission for certain activities involving aquatic organisms belonging to the people of Hawaii, under Section 187A-6, Hawaii Revised Statutes, and other applicable laws.

The Permittee is

Name:	Michael Blum	Address:	6823 St. Charles Avenue
Title:	Scientist		400 Lindy Boggs Building
Affiliation:	Tulane University		New Orleans, LA 70118

This permit is issued, subject to the general and special conditions, to take non-lethal, genetic samples from the following species listed in the table below to study freshwater goby recruitment and stream ecosystems.

Common Name	Scientific Name	Number Samples Authorized	Sampling Locations
Native gobies	<i>Lentipes concolor</i> , <i>Sicyopterus stimpsoni</i> , <i>Awaous guamensis</i> , <i>Stenogobius hawaiiensis</i> , <i>Eleotris sandwicensis</i>	See Attached List Special Conditions II.A	Only in Listed watersheds; See Special Conditions II.E.
Native crustaceans	<i>Atyoida bisulcata</i>	"	"
	<i>Macrobrachium grandimanus</i>	"	"
Native mollusks	<i>Neritina granosa</i>	"	"
	<i>Neritina vespertina</i>	"	"
Non-Native shrimp	<i>Macrobrachium lar</i>	"	"
Non-Native mollusks	<i>Tarebia granifera</i>	"	"
	<i>Melanoides tuberculata</i>	"	"

I. GENERAL CONDITIONS:

- A. This permit does not make the Department of Land and Natural Resources or the State of Hawaii liable in any way for any claim of personal injury or property damage to the permittee or assistants which may occur during any activity conducted under this permit; moreover, the permittee and all assistants agree to hold the State harmless

against any and all claims of personal injury, death or property damage resulting from activities of the permittee or any assistant.

- B. This permit conveys a privilege to engage in only those activities under the jurisdiction of the Department of Land and Natural Resources. The permittee is responsible for complying with all applicable County, State, and Federal requirements. The permit does not convey any privilege of access over or through private property.
- C. The primary permittee and designated assistants are required to obtain permission before entering upon lands or waters not under the jurisdiction of the Department (see "C", General Conditions, page 2 of this permit).
- D. The permittee and each assistant are individually responsible and accountable for their actions while conducting activities authorized under this permit; additionally, the permittee is responsible and accountable for the actions of the permittee's assistants.
- E. This permit is not transferable or assignable. Any person whose name does not appear on this permit and is conducting any activity described herein is subject to prosecution for violation of State laws.
- F. The permittee may request changes to the permit. Any such request to make changes to the permit must be made in writing and received by the Department at least thirty days prior to the change. The addition of new assistants will require each individual to sign the Attachment on page 6 stating that they have read, understood, and agree to abide by all general and special permit conditions. No change may be implemented without written approval from the Department.
- G. The permittee may request to:
 - 1. Add assistants to the permit;
 - 2. Add another permittee or replace an existing permittee in the manner stated above; and
 - 3. Change the activities authorized under this permit.
- H. The permittee or their assistant(s) must have with them a copy of this permit while conducting activities authorized by this permit.
- I. This permit authorizes collection of organisms protected by Federal law only with prior appropriate Federal authority, which must be described on Page 1 of this permit (if applicable).
- J. This permit does not by implication authorize the primary permittee or any designated assistant to engage in any other activity that is in violation of any other State, Federal or County law, regulation or ordinance.

- K. This permit does not authorize the sale of any collected organism or part therefrom.
- L. This permit expires on the date indicated on Page 1. Within one month of the expiration date, the permittee must return this permit to the address listed on the upper left corner of page 1 with complete information on all activities authorized under this permit, on the attached Activity Report form.
- M. The permittee and assistants agree to provide access to data obtained under authority of this permit upon request of the Division of Aquatic Resources, and to provide to the Division a copy of each report, published for distribution, prepared with data obtained under this permit. The permittee agrees to provide the Division of Aquatic Resources access to organisms obtained and held under this permit for on-site inspection.
- N. The permittee agrees to notify the island office of the Division of Conservation and Resources Enforcement at least 24 hours prior to any authorized activity being conducted in the field. Please provide the permittee name, the permit number, the date, time, and location of the planned activity, and contact information.
- O. A violation of any terms or condition of this permit or any violation of State law not covered by this permit may result in revocation of the permit and other penalties as provided by law. The permit may not be reissued if the permittee is not in compliance with the terms and conditions of this permit or any other permit issued to the permittee by the department of land and natural resources.

II. SPECIAL CONDITIONS

- A. This permit authorizes the use of small meshed (less than 2") hand nets, dip nets, minnow seines, and minnow traps to take non-lethal, genetic samples from the species listed on page 1. The samples may only be taken from the first or second dorsal fin of the fish and from the last pereopod from crustaceans to not affect swimming efficiency and feeding. No sampling is authorized for plankton and post-larvae under this permit.
- B. On Oahu, sampling of *Lentipes concolor* (fish), *Sicyopterus stimpsoni* (fish), *Atyoida bisulcata* (shrimp) and *Neritina granosa* (mollusk) is prohibited. Additional limits on Oahu are provided in Appendix 1. On Kauai, Maui, Molokai, Lanai, and Hawaii, sampling is limited as provided in Appendix 1. See Appendix 1 for further details.
- C. Sampling is only authorized in the watersheds listed in Appendix 1. The maximum number of samples, species, and watersheds are listed. Any sampling that is not listed in Appendix 1 is a violation of this permit.
- D. The permittee agrees to take all reasonable steps to minimize infections on sampled animals from the sampling regime and from handling, including fungicide treatments of sample sites on sampled animals. Tools used to take samples must be sterilized to prevent secondary infection in the sample areas on each specimen sampled.

- E. The permittee shall report, as required under General Conditions I.L. above, the following:
The date and time of all samples taken; GPS coordinates where samples were caught, total length (mm) for each specimen (fish-total length, crustacean – rostrum to uropods, mollusks – widest diameter); body part genetic sample taken from (e.g. first dorsal fin, 4th pereopod, mantle, etc.)
- F. Chemicals to take samples is expressly prohibited under this permit but may be used to disinfect tools and preserve samples once taken.

LAURA H. THIELEN, Chairperson
Department of Land and Natural Resources

cc: (x) DOCARE
(x) DAR-Kauai
(x) DAR-Maui
(x) DAR-Molokai

SIGNATURES AND AGREEMENT

By my signature below, I acknowledge receipt and understanding of the general and special conditions of this Special Activity Permit. Further, I agree to abide by all of these conditions when conducting activities authorized by this permit.

PRINCIPAL PERMITTEES:

Michael Blum

DESIGNATED ASSISTANTS:

Signature: Sunny B. Snider

Print Name: Sunny Snider

Signature: Chad Ferguson

Print Name: Chad Ferguson

Signature: Roderick Gagne

Print Name: Roderick Gagne

Signature: Brandon Policky

Print Name: Brandon Policky

Signature: Mat Quattrocelli

Print Name: Mat Quattrocelli

Signature: James Gilliam

Print Name: James Gilliam

Signature: Bradley Lamphere

Print Name: Bradley Lamphere

Signature: Ernst Hain

Print Name: Ernst Hain

Signature: Diane Biederman

Print Name: Diane Biederman

Signature: Debra Gilliam

Print Name: Debra Gilliam

Signature: Peter McIntyre

Print Name: Peter McIntyre

Signature: Dan Lindstrom

Print Name: Dan Lindstrom

Signature: _____

Print Name: _____

Signature: _____

Print Name: _____

ATTACHMENT FOR DESIGNATED ASSISTANTS ONLY

Primary Permittee: Michael Blum

I, being the primary permittee, hereby acknowledge the addition of the following designated assistants.

Michael Blum

Date

ADDITIONAL DESIGNATED ASSISTANTS

We, the undersigned, have read, understand, and agree to all conditions stipulated in the above Special Activity Permit.

Signature _____ Print Name: _____

Signature _____ Print Name: _____

Signature _____ Print Name: _____

Signature _____ Print Name: _____

Signature _____ Print Name: _____

Signature _____ Print Name: _____

Signature _____ Print Name: _____

Signature _____ Print Name: _____

Signature _____ Print Name: _____

Signature _____ Print Name: _____

Appendix 1

Blum-nonlethal	Native Stream Biota										
Island/watershed	Stream/code	Sampling Regime	'O'opu akupa <i>Eleotris sandvicensis</i>	'O'opu naniha <i>Stenogobius hawaiiensis</i>	'O'opu nakea <i>Awaous guamensis</i>	'O'opu nopili <i>Sicyopterus stimpsoni</i>	'O'opu alamo'o <i>Lentipes concolor</i>	'Opae kala'ole <i>Atyoida bisulcata</i>	'Opae 'oeha'a <i>Macrobrachium grandimanus</i>	Hapavai <i>Neritina vespertina</i>	Hihivai <i>Neritina granosa</i>
KAUAI (10)	21010	B	≤45	≤45	≤45	≤45	≤45	≤45	≤45	≤45	≤45
	21019	B	≤45	≤45	≤45	≤45	≤45	≤45	≤45	≤45	≤45
	21021	A	0	≤15	≤15	≤15	≤15	≤15	≤15	≤15	≤15
	22001	A	0	≤15	≤15	≤15	≤15	≤15	≤15	≤15	≤15
	22013	B	≤45	≤45	≤45	≤45	≤45	≤45	≤45	≤45	≤45
	23004	B	≤45	≤45	≤45	≤45	≤45	≤45	≤45	≤45	≤45
	23007	B	≤45	≤45	≤45	≤45	≤45	≤45	≤45	≤45	≤45
	25007	B	≤45	≤45	≤45	≤45	≤45	≤45	≤45	≤45	≤45
	25008	B	≤45	≤45	≤45	≤45	≤45	≤45	≤45	≤45	≤45
	25016	A	0	≤15	≤15	≤15	≤15	≤15	≤15	≤15	≤15
OAHU (13)	31010	B	≤15	≤15	0	0	0	≤15	≤15	≤15	0
	31018	B	≤45	≤45	≤45	0	0	≤45	≤45	≤45	0
	32002	B	≤15	≤15	0	0	0	≤15	≤15	≤15	0
	32004	B	≤15	≤15	0	0	0	≤15	≤15	≤15	0
	32009	B	≤15	≤15	0	0	0	≤15	≤15	≤15	0
	32015	B	≤45	≤45	≤45	0	0	≤45	≤45	≤45	0
	33007	B	≤45	≤45	≤45	0	0	≤45	≤45	≤45	0
	34010	A	≤15	≤15	0	0	0	≤15	≤15	≤15	0
	35002	A	≤15	≤15	0	0	0	≤15	≤15	≤15	0
	35004	A	≤15	≤15	0	0	0	≤15	≤15	≤15	0
	36006	B	≤45	≤45	≤45	0	0	≤45	≤45	≤45	0
	36008	B	≤45	≤45	≤45	0	0	≤45	≤45	≤45	0
	36010	A	≤15	≤15	0	0	0	≤15	≤15	≤15	0

Appendix 1

Blum-nonlethal	Sampling Regime			Native Stream Biota							
Island/watershed	Stream/code		'O'opu akupa <i>Eleotris sandwicensis</i>	'O'opu naniha <i>Stenogobius hawaiiensis</i>	'O'opu nakea <i>Awaous guamensis</i>	'O'opu noplili <i>Sicyopterus stimpsoni</i>	'O'opu alamo'o <i>Lentipes concolor</i>	'Opae kala'ole <i>Atyloda bisulcata</i>	'Opae 'oeha'a <i>Macrobrachium grandimanus</i>	Hapawai <i>Neritina vespertina</i>	Hihiwai <i>Neritina granosa</i>
MOLOKAI (12)	41003	B	≤45	≤45	≤45	≤45	≤45	≤15	≤15	≤15	≤15
	41009	A	≤15	≤15	0	≤15	≤15	≤15	≤15	≤15	≤15
	41015	A	≤15	≤15	0	≤15	≤15	≤15	≤15	≤15	≤15
	41021	B	≤45	≤45	≤45	≤45	≤45	≤45	≤45	≤45	≤45
	42002	B	≤15	≤15	0	≤15	≤15	≤15	≤15	≤15	≤15
	42003	A	≤15	≤15	0	≤15	≤15	≤15	≤15	≤15	≤15
	42004	B	≤45	≤45	≤45	≤45	≤45	≤45	≤45	≤45	≤45
	42005	A	≤15	≤15	0	≤15	≤15	≤15	≤15	≤15	≤15
	42014	A	≤15	≤15	0	≤15	≤15	≤15	≤15	≤15	≤15
	42015	B	≤45	≤45	≤45	≤45	≤45	≤45	≤45	≤45	≤45
	43018	B	≤45	≤45	≤45	≤45	≤45	≤45	≤45	≤45	≤45
	45004	A	≤15	≤15	0	≤15	≤15	≤15	≤15	≤15	≤15
Kawaalo (21.1946,-157.158)											
MAUI (11)	61002	A	≤15	≤15	0	≤15	≤15	≤15	≤15	≤15	≤15
	61011	B	≤45	≤45	≤45	≤45	≤45	≤45	≤45	≤45	≤45
	62003	A	≤15	≤15	0	≤15	≤15	≤15	≤15	≤15	≤15
	62007	B	≤45	≤45	≤45	≤45	≤45	≤45	≤45	≤45	≤45
	62009	B	≤45	≤45	≤45	≤45	≤45	≤45	≤45	≤45	≤45
	63001	B	≤45	≤45	≤45	≤45	≤45	≤45	≤45	≤45	≤45
	64022	B	≤45	≤45	≤45	≤45	≤45	≤45	≤45	≤45	≤45
	65012	B	≤15	≤15	0	≤15	≤15	≤15	≤15	≤15	≤15
	65013	A	≤15	≤15	0	≤15	≤15	≤15	≤15	≤15	≤15
	'Ālelele	A	≤15	≤15	0	≤15	≤15	≤15	≤15	≤15	≤15
	Manawainui	A	≤15	≤15	0	≤15	≤15	≤15	≤15	≤15	≤15
	0										
LANAI (1)	51031	A	0	0	0	0	0	≤15	≤15	≤15	≤15
	Mauna Lei Gulch										

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Appendix 1

Blum-nonlethal	Native Stream Biota										
Island/watershed	Stream/code	Sampling Regime	'O'opu akupa <i>Eleotris sandwicensis</i>	'O'opu naniha <i>Stenogobius hawaiiensis</i>	'O'opu nakea <i>Awaous guamensis</i>	'O'opu nopili <i>Sicyopterus stimpsoni</i>	'O'opu alamo'o <i>Lentipes concolor</i>	'Opae kala'ole <i>Atyoida bisulcata</i>	'Opae 'oche'a <i>Macrobrachium grandimanus</i>	Hapawai <i>Neritina vespertina</i>	Hihiiwai <i>Neritina granosa</i>
HAWAII (9)	'A'amakāō Gulch	81012	B	≤45	≤45	≤45	≤45	≤45	≤45	≤45	≤45
	Wailoa	81044	B	≤45	≤45	≤45	≤45	≤45	≤45	≤45	≤45
	Kaivīlāhili	82009	A	≤15	≤15	0	≤15	≤15	≤15	≤15	≤15
	Pu'uokālepa	82050	A	≤15	≤15	0	≤15	≤15	≤15	≤15	≤15
	Honolū'i	82056	B	≤45	≤45	≤45	≤45	≤45	≤45	≤45	≤45
	Wailoa River	82061	B	≤45	≤45	≤45	≤45	≤45	≤45	≤45	≤45
	N'īnole Gulch	83014	B	≤45	≤45	≤45	≤45	≤45	≤45	≤45	≤45
	Wai'ulua	85003	B	≤45	≤45	≤45	≤45	≤45	≤45	≤45	≤45
	Hohepaia	85004	B	≤45	≤45	≤45	≤45	≤45	≤45	≤45	≤45

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